KINGMAN, ARIZONA, SATURDAY, AUGUST 23. 1913.

#### Advances in Concentration.

The prosperity of the mining industry depends largely on the possibility of treating large tonnages of low grade ore. The bonanza mines are an important factor, and their production, by their fabulous richness, aids in attracting attention to the industry and makes men more willing to risk their capital in mine development. real success is based.

The importance of the so-called porhere. It is here. It is well known. However, looked at from the technical and scientific side, the concentration Swansea, Wales. of these ores is not an unqualified success. Losses are heavy and extraction low. As an evidence of the desire to advance along this line is the increasing search for cheaper and wore efores is well advanced abroad, especially in Australia, and it is only a question of time when it will become as familiar in this country as it has

Flotation is just beginning to get deserved attention here. Merely a recital of what is being done emphasizes has in process of construction a 600-ton flotation plant, built as a result of highly successful preliminary tests indicating a great increase in extraction at as low or lower cost than gravity methods. The Nevada Consolidated. tests are to be undertaken at the mill of the Ohio Copper company on Bingham ores. We understand that Utah Copper is also making extensive tests. These are only a few of the activities. In zinc ores, to which the process is especially applicable, the Butte and Superior, at Butte, has a mill of large espacity which is using flotation methods with higher extraction than could be obtained in any other way.

Not only are the low grade sulphide ore of copper and zinc being now treated and tested, but the concentration, or more properly, reduction of oxide ores by methods now little used in the United S ates is being advanced. Silicious oxide ores are fit subjects for leaching. For many years the Shannon and other companies in Arizona have leached their ores successfully. Among those now testing out leaching methods are the Anaconda Copper Co. at Anaconda, Montana, and the Nevada-Douglas at Ludwig, Nevada. The Bullwhacker and Butte and Duluth at Butte bave leaching plants in successful operation, and claim great efficiency at very low cost. The Nevada-Douglas will treat ore, while the Anaconda plans to leach its silicious tailings, by a method which we hope to give in some detail at an early date. Construction of the plant at peninsula complain of want of water Anaconda is well under way.

A very few years should see these two methods displacing many of the gravity methods now used for the low grade ores. Both ideas are old, but have only been extensively practiced abroad. Flotations bids fair to revolutionize the milling of porphyry ores, while leaching should make a much larger portion of our known low grade copper ore treatable at a profit which will maintain the copper supply at a high level for a long time to come.-Salt Lake Mining Review.

## A New Montana Project.

The most important mining and industrial project undertaken in Montana in recent years has been started through the organization and incorporation of the Boston & Montana Development company, capital 15,000,-0 108, and the Butte, Wisdom & Pacific railway company, capital 3,000,0008, the purpose of which is to open the country of the Big Hole valley in Commercial.

them developed to a producing stage, and a number of placer mining claims, in addition to extensive and valuable Gulch mines are situated in Deer Lodge county and will be reached by a seven mile branch of the proposed railroad, extended from Ralston, the entrance to the Big Hole valley.

In the Elkhorn district, Beaverhead county, the company has secured the But it is upon the low grade ores that transfer of 30 mining claims and two or three producing mines, yielding big values in copper, gold, silver and lead. phyry coppers need not be emphasized In the Elkhorn district copper was mined in the early 60's and some remarkably high grade ore shipped to

However, with the big increase in copper production elsewhere the Elkhorn mines were closed because of the extreme difficulty of getting ore out of the district and supplies in, the mines ficient methods of concentration. The being from 50 to 80 miles from a railuse of flotation principles for the re. road even at this date; but they can covery of sulphides from low grade be reached by a railroad branch extended from Dewey, Mont., on the line of the proposed new road. up the Wise river, a distance of only 17 miles. The ore in both the Elkhorn and French Gulch mines is remarkably like the ore from the Butte district, and the country and vein formation is of ore can be handled profitably; elecidentical. Ore running as high as this point. In Arizona the Inspiration 1,000% a ton has been shipped from the Elkhorn district. A lot of it has been mined in the Aspen that runs 22 per cent copper, 250 ounces in silver and

188 in gold to the ton. The new mining and railroad project is backed chiefly by Montana in Nevada, plans a 100-ton plant, and capital, stockmen, ranchers and mine owners turning large holdings into the Development company, which will finance the railroad company and provide some of the capital for the development and operation of the mines.

> The Central mine in the French Gulch district is extensively developed and a vein 32 feet wide has been opened by a 900-foot tunnel, the ore from which, according to engineers' reports, carries 17 per cent copper. In the Spain mine in the French Gulch district there are 30,000 tons of ore blocked out, having an average gross value of 17.648 a ton.

> Among the officers and directors of the two companies are W. R. Allen, capitalist, and the former lieutenantgovernor of Montana: Hon. Sir Frederick W. Borden, of Ottawa; W. C. Siderfit of Butte, general manager of Senator Clark's interests; William Wallace, Jr., former chief counsel for the Northern Pacific railway; Charles E. Miller of Wisdon, one of the ranchers and big stockmen of the Big Hole. Three eastern directors have not yet been announced.

## Alaska Mines Idle.

A Nome, Alaska, dispatch says Reports from every district on Seward for placer mining. The total rainfall so far this summer is only one inch, the lowest in fourteen years. The snowfall last winter was also light and as a result all gold mining operations, excepting a few dredging projects, have been suspended. The river on which freight is conveyed to the Squirrel district is nearly dry and freight is piled along the banks awaiting for the water to rise.

It is feared that there will not be enough water before the freeze up to float in the winter supplies and all trict next winter. No sluice box or pick and shovel work is being done in any district, and Nome is full of idle clude the profits made by non-reportmen. Many are already leaving for Seattle and those who are remaining here are confronted with the serious problem of earning sufficient to tide them over the winter.

## The Best Pain Killer

Bucklen's Arnica Salve when apbig mining district of Elkhorn and plied to a cut, bruise, sprain, burn or French gulch, and the famous cattle scald, or other injury of the skin will immediately remove all pain. E. E. Southern Montana, says the Boston Chamberlain of Clinton, Me. says:-"It robs cuts and other injuries of In the French Gulch district the De. their terrors. As a healing remedy velopment company takes over about its equal don't exist." Will do good 20 quartz mining claims, several of for you. Only 25c. at H. H. Watkins. companies have paid dividends total- dealers.

#### Old Mines and Prospects.

It is an old saying that "once a mine, water rights, camps, etc. The French always a mine." This is very largely true, although there are some exceptions to the rule. The life of a producing mine is governed by conditions. It is often the case that in its have yielded profits in the shape of operation a state of affairs may arise on account of which it is deemed best to shut down. A decline in metal quotations, for instance; a change in the character of ore; a prohibitive cost for power, a heavy inflow of water. or various other features which make mining unprofitable. It is not very often, however, that it is necessary to close down because of an utter lack of ore, excepting in the case of a mine that has been worked very extensively for years, and which has been a heavy

And, it is very often the case that conditions which caused the practical abandonment of a property, temporarily, at least, may be overcome so that successful operations may be resumed. Metal quotations may prove materially, just as they have during the past six months; new methods of ore treatment are constantly being evolved, so that the changed character tric power lines have been installed in almost every mining camp of note in the west, and improved pumping machinery makes it possible to handle water that hanlicapped operations a few years ago. This being the case, therefore why is it that so many really good mines in almost every portion of the west, are allowed to remain idle and practically abandoned?

It is a strange condition of affairs when men are willing to spend a small fortune in the development of prospects when, in numerous districts there are many idle mines which have been quite extensively developed; which have been equipped for successful operation, in whose workings large bodies of payable ore are known to exist, and which could be placed on a profitable producing basis, again, at a tenth of the cost that would be required to transform a prospect into a bread-winner. And yet such is the case. It is a step in the right direction when work is begun in the development of a prospect, for all mines were prospects once. But, why neglect the property that has already reached a producing stage; a mine which can be operated at a profit, now, character, caused a suspension of activities a few years ago?

There are many men in Salt Lake City who own interests in mines which were productive ten, fifteen or twenty years ago, but which have since been idle. In these mines, if they only knew it, if they only realized the opportunity now presented, a source of the Arizona Commercial company is big revenue awaits them, a fortune reported by Superintendent Boyd. beckons them; and yet they complain The crosscut on the 12th level, one of hard times and, Micawber like, sit bundred feet south of the shaft, has around and bewail the fact that the cut a ledge of iron 40 feet wide, well mining industry is not what it used to oxidized and carrying some sulphides. be.-Salt Lake Mining Review.

## Mining Dividends.

From Reports made to Mining and Engineering World to the end of July, 135 American mines and works enriched shareholders during the seven months of 1913 to the extent of 62,-208,728\$. This does not include the 14.227.978% disbursed by ten securities. work will be suspended in that dis- holding corporations which look for their profits largely to holdings in operating companies, nor does it ining companies, nor privately-owned

> The 135 companies mentioned above have paid 863,523,287\$ dividends to their shareholders. This is pearly 65,000,0008 in excess of issued capital. The ten securities holding corporations paying dividends in 1913 are credited with total disbursements of 171,181,307\$.

> Thirty-three of the 135 companies

ing 417,640.227\$ on a combined issued capital of 288,996,857\$.

Ninety-six properties are classed as gold, silver, lead, zinc producers and they are credited with dividend payments in 1913 amounting to 21,474,901\$. Since incorporation these companies dividends totaling 299,770,751\$ a return of 39,914,5048 in excess of outstanding capital.

Sixty three of the above properties are located in the United States and they have paid dividends so far this year amounting to 10,975,899\$, with total disbursements of 199,398,1958. with 166,559,637\$ outstanding capital.

Nineteen Canadian companies report dividends in 1913 of 7,711,086\$ with total disbursements of 49,013,4718; outstanding capital is 61,144,020\$.

Fourteen Mexican companies have paid 2,787,916\$. These 14 companies have, however, total dividends payments of 51,359,085\$, on an outstanding capital of 32,152,590s.

Six metallurgical companies paid dividends at stated intervals during the year totaling 9,060,244\$ and to date have to their credit 146.112,3098

#### 1,500,000\$ in Mexican Bullion.

George F. Hutchins, brother of Couny School Superintendent D. B. Hutchins, of Tombstone, arrived in the city today on a visit from Parral. Mexico, where he holds the position of master mechanic at the Alvarado mine at that place.

Mr. Hutchins traveled overland all the way from Parral to Presidio del Norte on the line, by mule team. The company with which he is connected. having, on hand a large amount of silver and gold bullion and fearing confiscation by the federals, decided to take the bullion out of the country into the United States. The party traveled for seventeen days through rebel country from Parral to Presidio del Norte, and carried no guard during the whole distance. The train comprised 14 wagons with 12 mules to the wagon, and about 1,500,000\$ worth of gold and silver bullion, weighing about thirty tons was carried safely out of the country.

The party met with no mishap during the whole journey and the fact that they traveled through rebel territory all of the way accounts for it. Had the federals known that this large amount of bullion was being carried even if conditions, unfavorable in out trouble would have been encountered, but as it was traveling through the rebel territory, the party was not molested.-Tombstone Prospector.

### Iron Ledge Struck by Arizona Commercial.

An important strike in the mine of

Although this ledge where penetrated carries but little copper, it is the same ledge which many years ago yielded a considerable tonnage of very rich ore, extracted from shallow openings on the surface. Apparently it is the same ledge which runs through the Gray and other claims of the United Globe mines and which contributes largely to the production of the Old

Drifting on this ledge on the Arizona Commercial is now in progress and the management is hopeful of opening up commercial ore in quantitv.-Globe Record.

## Remarkable Cure of Dysentery.

"I was attacked with dysentery about July 15th, and used the doctor's medicine and other remedies with no relief, only getting worse all the time. I was unable to do anything and my weight dropped from 145 to 125 pounds. I suffered for about two months when paying dividends in 1913, operate cop | I was advised to use Chamberlain's per properties, all but three in the Colic, Cholera and Diarrhoea Remedy. United States, and they have to their I used two bottles of it and it gave me credit so far this year disbursements permanent relief," writes B. W. Hill totaling 31,673,6238. To date these of Snow Hill, N. C. For sale by all

#### Poland Mill to Start Up.

Announcement was made yesterday that the Poland mill on Big Bug creek was to be started up in a few days, in making a test run of about 100 tons of what is believed to be rich gold ores taken recently from the Fortune mine. owned by Stukey Bros., of Walker.

If results are satisfactory, the intention is to continue development and make regular shipments for an indefinite time. This property is situated on the Lynx creek side of the range of mountains, and but a few miles distant from the plant. It is an old producer, and lack of facilities for treating the output has kept it in the background.-Journal Miner.

#### Minister Praises this Laxative

Rev. H. Stubenvoll of Allison, Ia., in praising Dr. King's New Life Pills for constipation, writes:-"Dr. King's New Life Pills are such perfect pills no home should be without them." No better regulator for the liver and bowels. Every Pill guaranteed. Try them. Price 25c, at H. H. Watkins.

NEW BOAT AT GREGGS' FERRY Mohave County, seventy miles from Kingman; 10 by 35; capable of carrying 10 tons. Can cross at any time.

THOMAS GREGG.

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